Semester II

20

HW 3 – Grade 11(Core)

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| **Name** |  | **Subject** | **Mathematics** |
| **Section** |  | **Due Date** | **15/2/2012** |

**The Remainder and Factor Theorems**

**Use synthetic substitution to find *f*(-3) and *f*(4) for each function.**

1. *f*(*x*) = *x*4 − 2*x*2 − *x* + 7 2) *f*(*x*) = *x*5 + 7*x*3 − 4*x* – 10

**Given a polynomial and one of its factors, find the remaining factors of the polynomial**.

1. *x*3 + 5*x*2 − 2*x* − 24; *x* – 2 2) 4*x*3 − 12*x*2 − *x* + 3; *x* – 3

*3)x*3 − *x*2 − 14*x* + 24; *x* + 4 4) *x*5 + *x*4 − 5*x*3 − 5*x*2 + 4*x* + 4; *x* + 1